

## **HYBRID Pd-RADICAL CHEMISTRY: NEW MECHANISM, NEW POSSIBILITIES**

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We uncovered new reactivity of hybrid Pd-radical species, generated at room temperature under visible light without use of exogenous photosensitizers. This led to the development of novel transformations, including new types of Heck reaction, aliphatic C–H functionalization methods, as well as new cascade transformations. A set of both directed and direct functionalization methods have been developed.

The scope of these transformations will be demonstrated and the mechanisms will be discussed.